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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,393	02/13/2004	Harumi Ooshima	10445/13	9011

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Chicago, IL 60610

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/779,393

Applicant(s)

OOSHIMA ET AL.

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/13/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: elements 6C, 6D, 4C, 4D, and 11 of pg. 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the piston claimed in line 2 of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Marked-up Drawings" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following phrases lack proper antecedent basis in the claims:

- "the vehicle body side" in line 3 of claim 1;
- "said supporting member side" in lines 2-3 from the bottom of claim 1 and in line 2 of claim 8;
- "said supporting portion" in the last line of claim 7.

Re: claim 13. The phrase "a wall portion" in the last line of claim 13 is indefinite. It is unclear to the Examiner whether the wall portion in claim 13 is intended to be the same or different from the earlier recited wall portion.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP-2002-327780 (JP'780).

Re: claim 1. In a first interpretation JP'780 shows in figures 1 and 2 a disc brake

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comprising a pair of brake pads 3,4 disposed on either side of a disc rotor D and pressed against the disc rotor by a piston 14, a supporting member 1 attached on the vehicle body side, which supports the pair of brake pads movably in the axial direction of the disc rotor, and a return spring 30 having a base end portion attached to the brake pads as shown in the area of element 31 and a distal end portion 36 which presses the supporting member such that the brake pads are urged in a direction away from the disc rotor, wherein positioning means 37 are provided on the supporting member side for restricting movement of the distal end portion of the return spring to the side of the direction of extension of the return spring. In a second interpretation positioning means or area in which the distal end portion is placed in the vicinity of the lead line of number 28 shown in figure 2 are provided on the supporting member side for restricting movement of the distal end portion of the return spring to the side (upper side) of the direction of extension of the return spring.

Re: claims 2, 8, and 9. In the second interpretation JP'780 shows in figures 1 and 2 the limitation wherein the positioning means restrict movement of the distal end portion of the return spring by means of a wall portion shown in the area of element 28 formed on the supporting member.

Re: claims 3, 4, 10, and 11. In the second interpretation JP'780 shows in figures 1 and 2 the limitation wherein a guiding member 5 is interposed between the brake pads and the supporting member, the guiding member comprises a contact portion shown below element 35 in the area of the intersection of elements 5 and 30 which extends to the vicinity of the wall portion along the surface of the supporting member in

the circumferential direction of the disc rotor, and the distal end portion of the return spring is pressed against the contact portion as shown in figure 2.

Re: claims 5, 6, 12, and 13. In the second interpretation JP'780 shows in figures 1 and 2 the limitation wherein a guiding member 5 is interposed between the brake pads and the supporting member, and the positioning means shown in the area of element 28 restrict movement of the distal end portion of the return spring by means of a wall portion 28 formed on the guiding member.

Re: claim 7. JP'780 shows in figures 1 and 2. a disc brake comprising a pair of brake pads 3,4 disposed on either side of a disc rotor D and pressed against the disc rotor by a piston 14, a supporting member 1 attached on the vehicle body side which supports the pair of brake pads movably in the axial direction of the disc rotor, and a return spring 30 having a base end portion attached to the brake pads in the area of element 31 and a distal end portion 36 which presses the supporting member such that the brake pads are urged in a direction away from the disc rotor, wherein a protective convex portion shown between the lead lines of elements 2 and 15 having a protruding height of at least half the protruding height of the return spring is provided in a standing position in the vicinity of the return spring of the supporting portion, as best understood.

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9. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5947233 to Kobayashi et al.

Re: claim 1. Kobaysahi et al. show in figures 1, 3, and 4 a disc brake comprising a pair of brake pads 8,9 disposed on either side of a disc rotor 1 and pressed against the disc rotor by a piston, a supporting member 3 attached on the vehicle body side, which supports the pair of brake pads movably in the axial direction of the disc rotor, and a return spring 13 having a base end portion 13D attached to the brake pads via element 11 as shown in figure 3 and a distal end portion 13A which presses the supporting member such that the brake pads are urged in a direction away from the disc rotor, wherein positioning means or portion shown directly below element 13A in figure 3 (particularly the left side portion of the positioning means) are provided on the supporting member side for restricting movement of the distal end portion of the return spring to the side (the right side) of the direction of extension of the return spring.

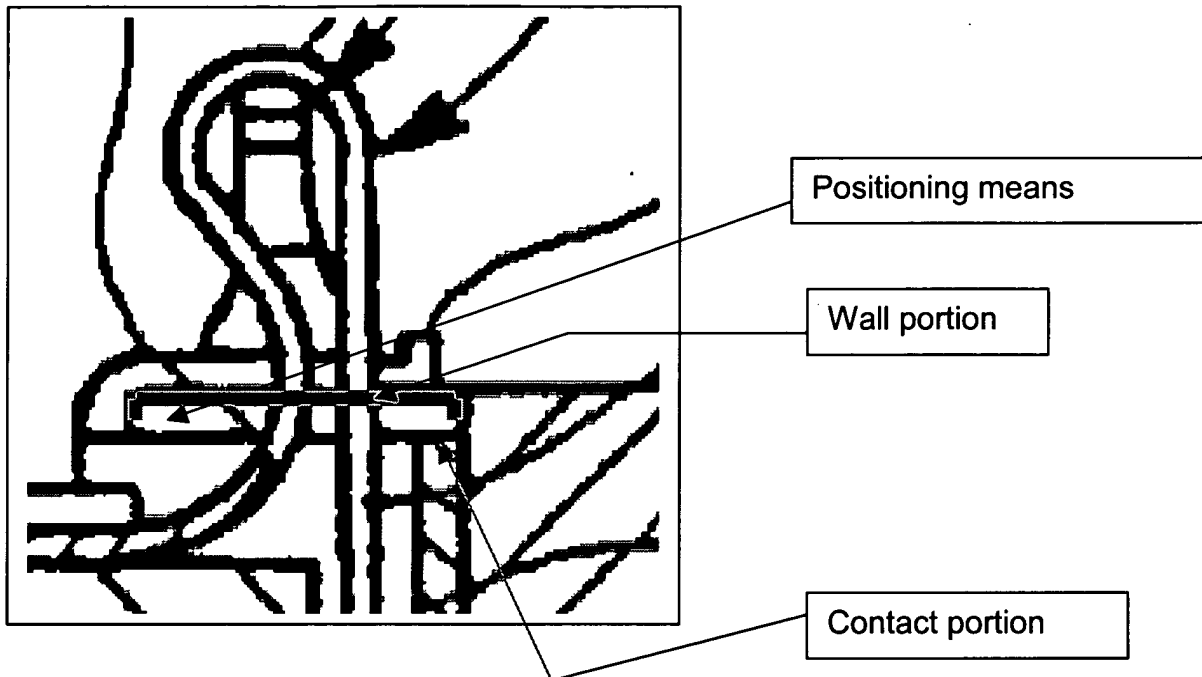
Re: claims 2, 8, and 9. Kobayashi et al. show in figures 1, 3, and 4 the limitation wherein the positioning means restrict movement of the distal end portion of the return spring by means of a wall portion (including the upper surface and side surfaces of the portion shown directly below element 13A) formed on (left surface of) the supporting member as labeled on pg. 8.

Re: claims 3, 4, 10, and 11. Kobayashi et al. show in figures 1, 3, and 4 the limitation wherein a guiding member 12 is interposed between the brake pads and the supporting member, the guiding member comprises a contact portion as labeled on pg. 8 which extends to the vicinity of the wall portion along the surface of the supporting



member in the circumferential direction of the disc rotor, and the distal end portion of the return spring is pressed against the contact portion as shown in figure 2.

Below is an enlarged section of figure 3:



Re: claims 5, 6, 12, and 13. Kobayashi et al. show in figures 1, 3, and 4 the limitation wherein a guiding member 12 is interposed between the brake pads and the supporting member, and the positioning means or portion shown directly below element 13A restrict movement of the distal end portion of the return spring by means of a wall portion (particularly the left side surface of the wall portion) formed on the (upper surface of the) guiding member.

Re: claim 7. Kobayashi et al. show in figures 1, 3, and 4 a disc brake comprising a pair of brake pads 8,9 disposed on either side of a disc rotor 1 and pressed against the disc rotor by a piston, a supporting member 3 attached on the vehicle body side

which supports the pair of brake pads movably in the axial direction of the disc rotor, and a return spring 13 having a base end portion attached to the brake pads in the area of element 13D by way of element 11 and a distal end portion 13A which presses the supporting member such that the brake pads are urged in a direction away from the disc rotor, wherein a protective convex portion 6 having a protruding height of at least half the protruding height of the return spring is provided in a standing position in the vicinity of the return spring of the supporting portion, as best understood.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 5069313, 5934417, and JP2000-220670 teach similar disc brake assemblies having similarly positioned return springs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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December 15, 2004

Melody M. Burch  
12/15/04